

# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: March 16, 2016

For the Period: 03/17/16 to 04/03/16 (16-077 – 16-094)

**DSN OPSCHIEF (1) 230-102**

**DSOT (1) 230-102**

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 Howard, S. (3)  
 Ludwig, R. (2)  
 Matsumoto, S.  
 Medina  
 Peralta, F.  
 Weeks, T.  
 Wong, R.  
 Yang, L.  
 Zottarelli, L.  
 \*odivers@san.rr.com

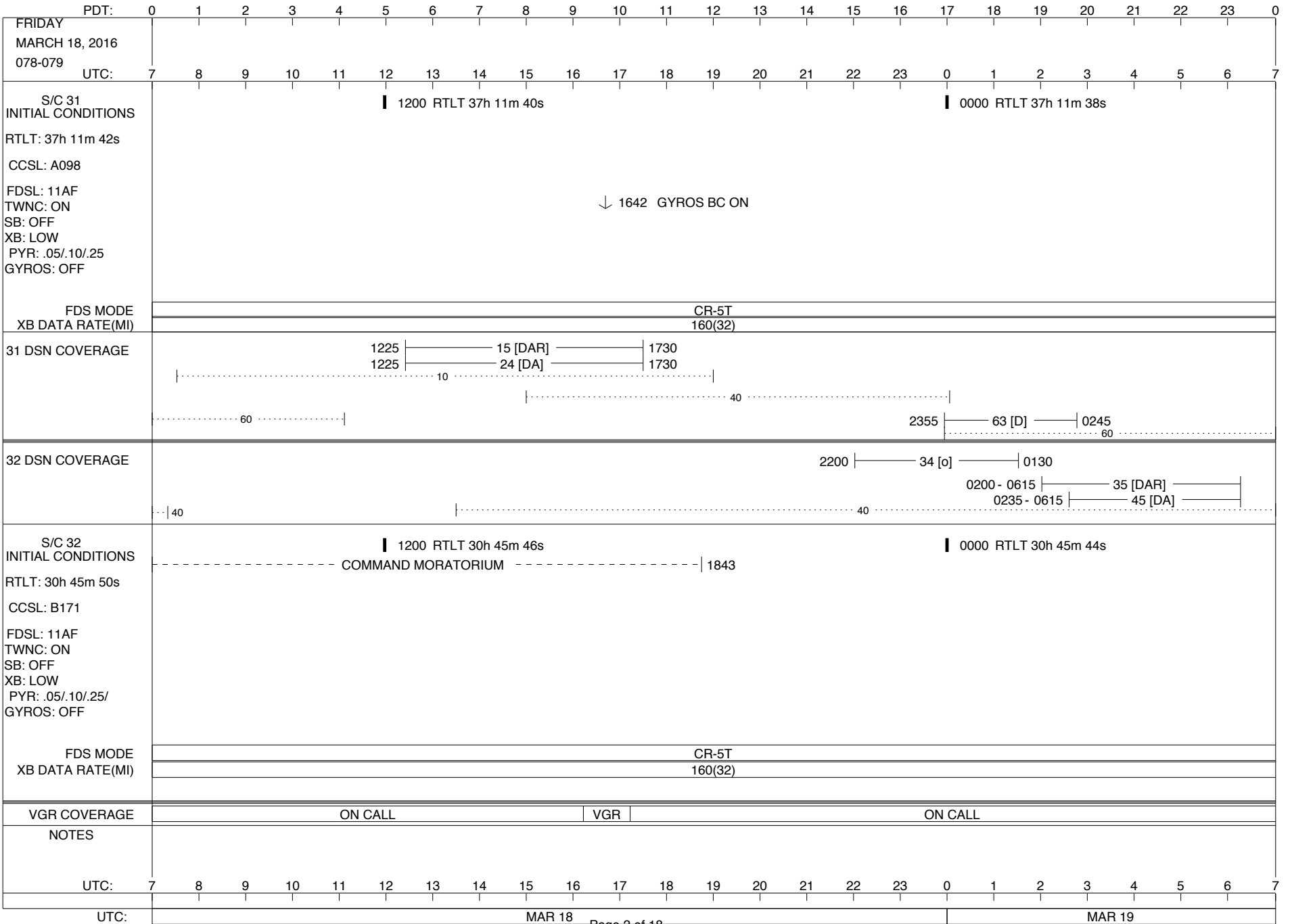
**LEGEND:**  
 ▽ = R/T Command (Last chance or Contingency)  
 ▼ = R/T Command (Scheduled)  
 \* = Result of R/T Command  
 n = (where n = 1,2,3 ..) Special Note, see bottom of page  
 A = Arrayed station  
 B = BLF  
 D = Downlink only pass  
 H = High Power Transmitter  
 R = Array Reference Antenna  
 T = TLC Uplink  
 U = Uplink only pass  
 [o] = Ramp-through

\*Electronic Copy Only  
 (16 – Dist/N: Paper Copies)  
 09/08/10

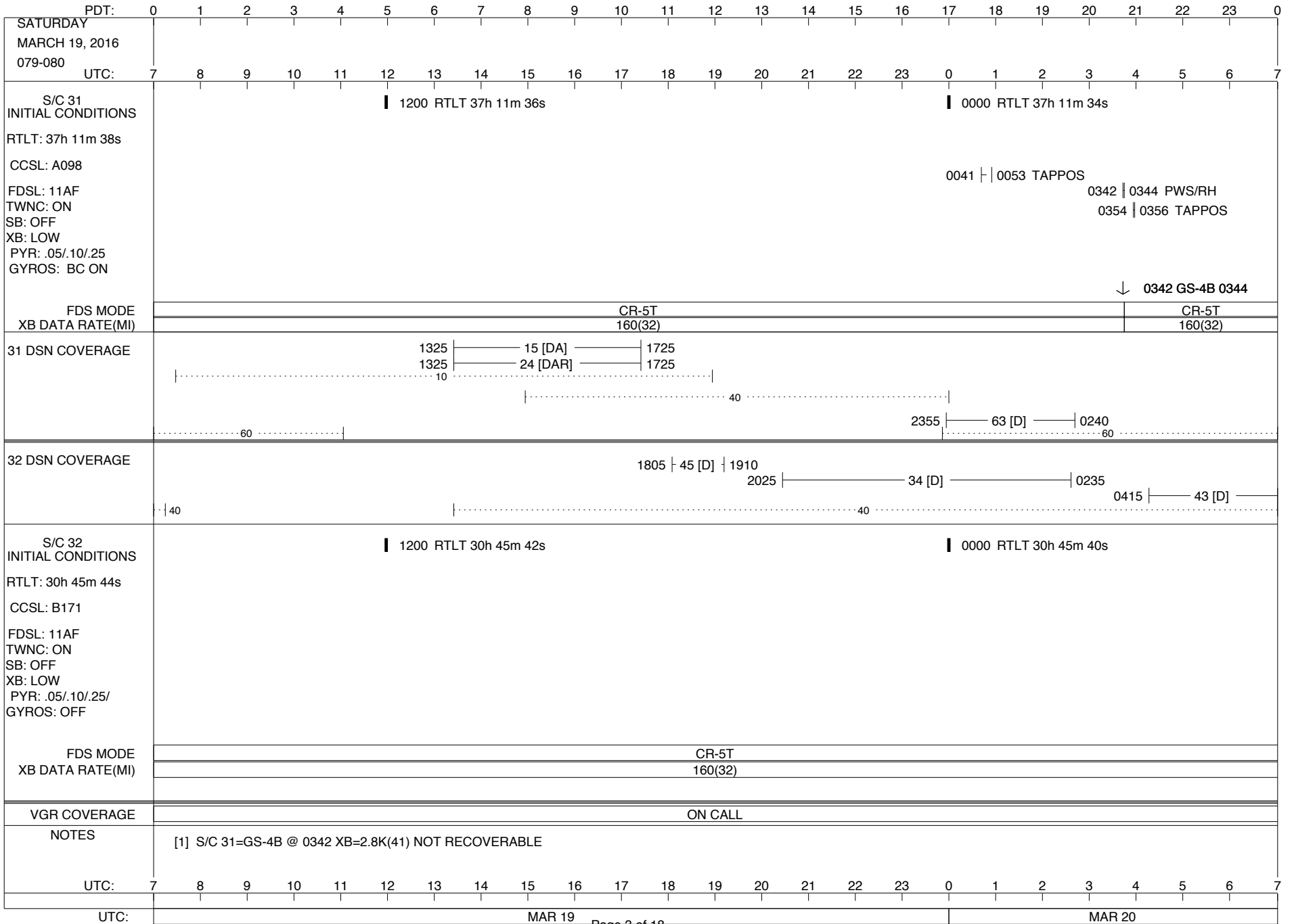
ISSUE DATE: 03/17/16 06:06

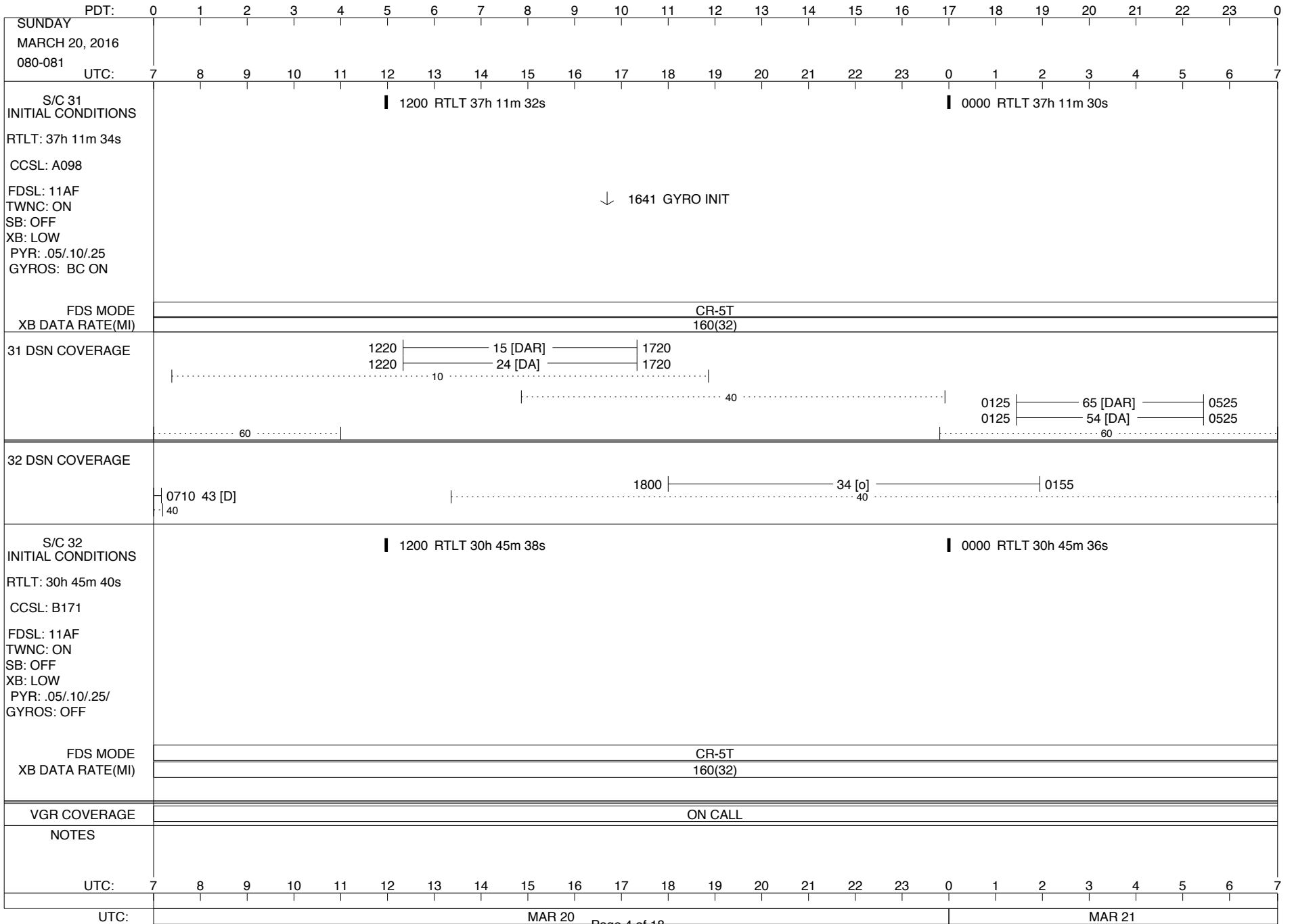
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THURSDAY MARCH 17, 2016 077-078																									
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S/C 31 INITIAL CONDITIONS RTLTL: 37h 11m 46s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 37h 11m 44s												0000 RTLTL 37h 11m 42s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	1225  -----  24 [DA]  -----  1640 1225  -----  25 [DAR]  -----  1640  -----  10  -----  40  -----  60												2141   -   2207 TAPPOS 0043   0044 PWS/RH 0054   0107 TAPPOS ↓ 0042 GS-4B 0044												
32 DSN COVERAGE	1830  -----  43 [o]  -----  0215  -----  40												S/C 32 INITIAL CONDITIONS RTLTL: 30h 45m 54s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: HI PYR: .05/.10/.25/ GYROS: OFF												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												1200 RTLTL 30h 45m 52s 0000 RTLTL 30h 45m 50s ----- COMMAND MORATORIUM ----- ↓ 1909 TEMP CRS CMD WORDS ↓ 0125 X/B LOW POWER ↓ 0129 BAY 1 HTR ON ↓ 0135 RESTORE CRS CMD WORDS												
VGR COVERAGE	ON CALL												VGR   ON CALL												
NOTES	[1] S/C 31=GS-4B @ 0042 XB=2.8K(41) NOT RECOVERABLE																								
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	MAR 17												MAR 18												

ISSUE DATE: 03/17/16 06:06



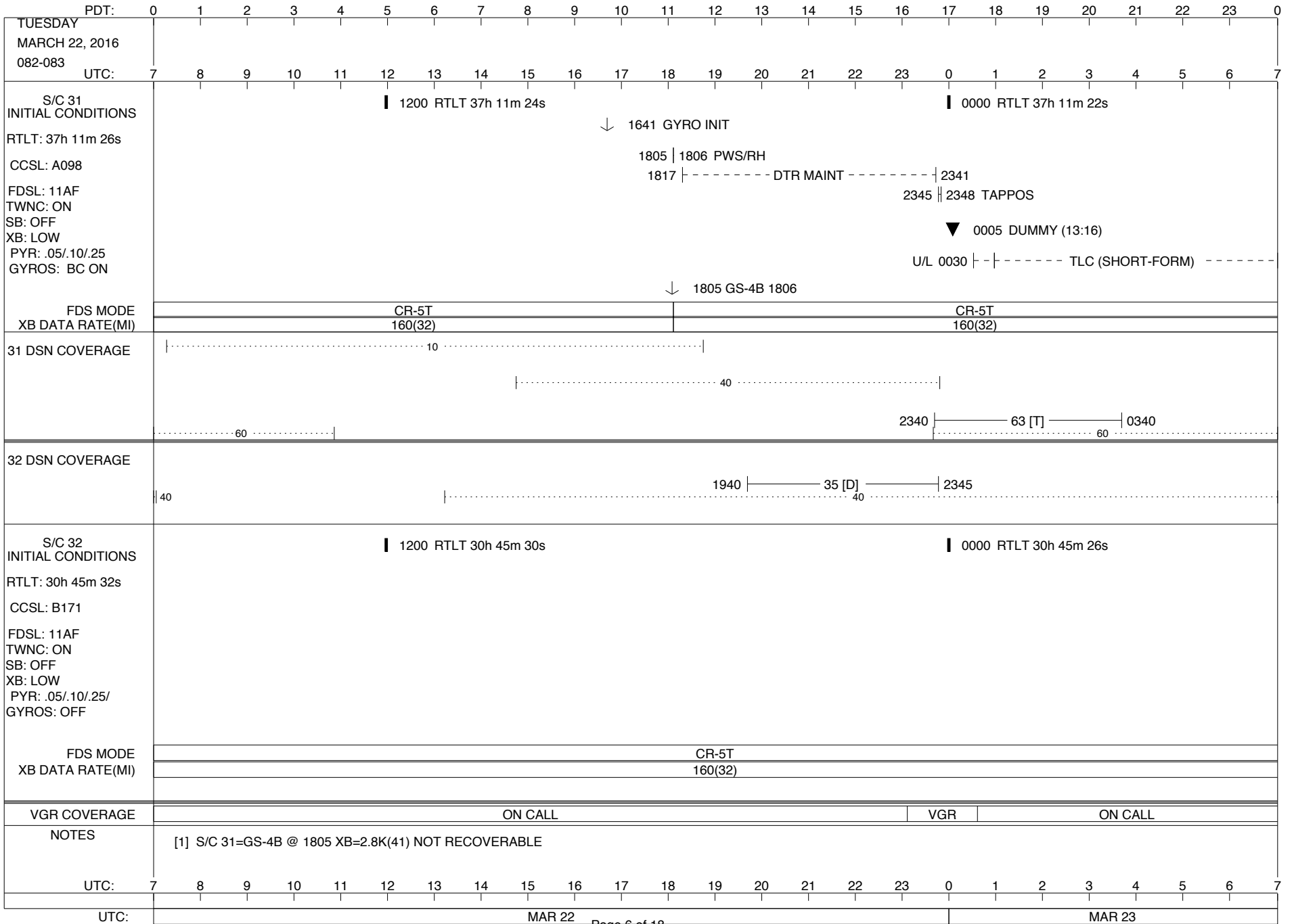
ISSUE DATE: 03/17/16 06:06





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MONDAY MARCH 21, 2016 081-082																									
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S/C 31 INITIAL CONDITIONS RTLT: 37h 11m 30s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC ON	1200 RTLT 37h 11m 28s												0000 RTLT 37h 11m 26s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
31 DSN COVERAGE	..... 10 .....												..... 40 .....												
	..... 60 .....												2345   ..... 63 [D] .....   0400   ..... 60 .....												
32 DSN COVERAGE	40   .....												2135   ..... 34 [D] .....   0225   ..... 40 .....												
S/C 32 INITIAL CONDITIONS RTLT: 30h 45m 36s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 45m 34s												0000 RTLT 30h 45m 32s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
VGR COVERAGE	ON CALL																								
NOTES																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	MAR 21												MAR 22												

ISSUE DATE: 03/17/16 06:06



PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0			
WEDNESDAY MARCH 23, 2016 083-084																												
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7			
S/C 31 INITIAL CONDITIONS RTLT: 37h 11m 22s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC ON						█ 1200 RTLT 37h 11m 20s															█ 0000 RTLT 37h 11m 18s							
----- TLC (SHORT-FORM) -----																												
FDS MODE	CR-5T																											
XB DATA RATE(MI)	160(32)																											
31 DSN COVERAGE	<p>..... .....10..... .....</p> <p style="text-align: center;">.....1930  --- 43 [D] ---  2130.....</p> <p style="text-align: center;">.....40.....</p> <p>.....60..... .....</p>																											
32 DSN COVERAGE	<p>.....40..... .....</p> <p style="text-align: center;">.....1815  --- 34 [o] ---  2215.....</p> <p style="text-align: center;">.....40.....</p>																											
S/C 32 INITIAL CONDITIONS RTLT: 30h 45m 26s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF						█ 1200 RTLT 30h 45m 24s																						
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7			
UTC:	MAR 23														MAR 24													
VGR COVERAGE	ON CALL																											
NOTES																												

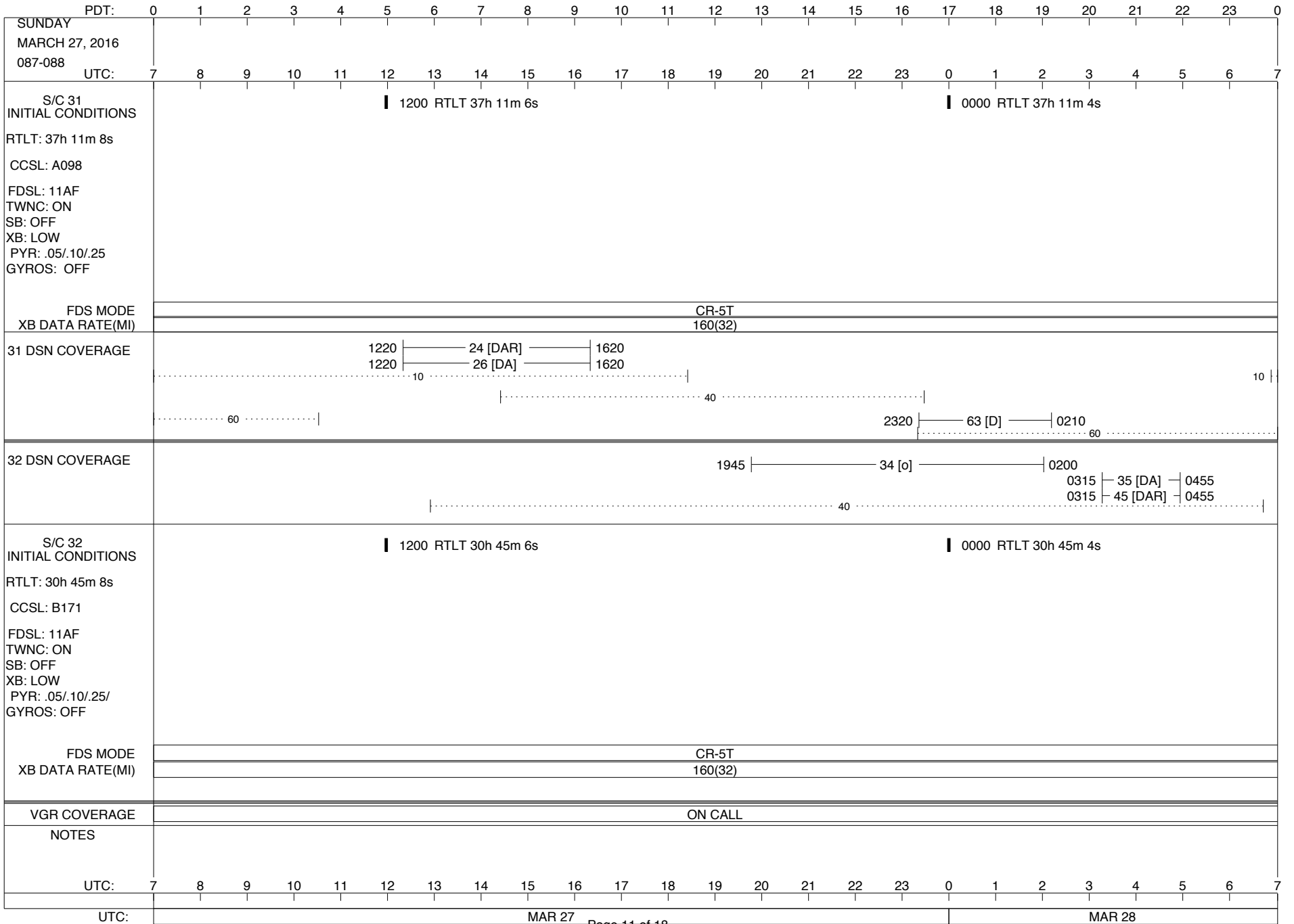


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THURSDAY MARCH 24, 2016 084-085																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLTL: 37h 11m 18s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC ON	1200 RTLT 37h 11m 16s												0000 RTLT 37h 11m 16s ↓ 0118 BAY 1 HTR OFF ↓ 0122 X/B HIGH POWER ↓ 0142 AAI 0145  ----- MAGROL -----												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1105  ----- 24 [DA] -----  1645 1105  ----- 25 [DAR] -----  1645 ..... 10 ..... ..... 40 ..... ..... 60 .....												2335  ----- 63 [DA] -----  0100  ----- 54 [DA] -----  0100  ----- 55 [DAR] -----  ..... 60 .....												
32 DSN COVERAGE	..... 40 .....												0050  ----- 34 [D] -----  0215 0300 - 0650  ----- 43 [B] -----												
S/C 32 INITIAL CONDITIONS RTLTL: 30h 45m 22s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 45m 20s												0000 RTLT 30h 45m 18s  DUMMY (5 MIN BRACKETED 11:03) 0417▼												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL												VGR												
NOTES	[1] S/C 31=GS-4B @ 0018 XB=2.8K(41) NOT RECOVERABLE [2] S/C 31=D/L AGC & SNR VARIATIONS EXPECTED DURING MAGROL (0145-0740)																								
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	MAR 24												MAR 25												

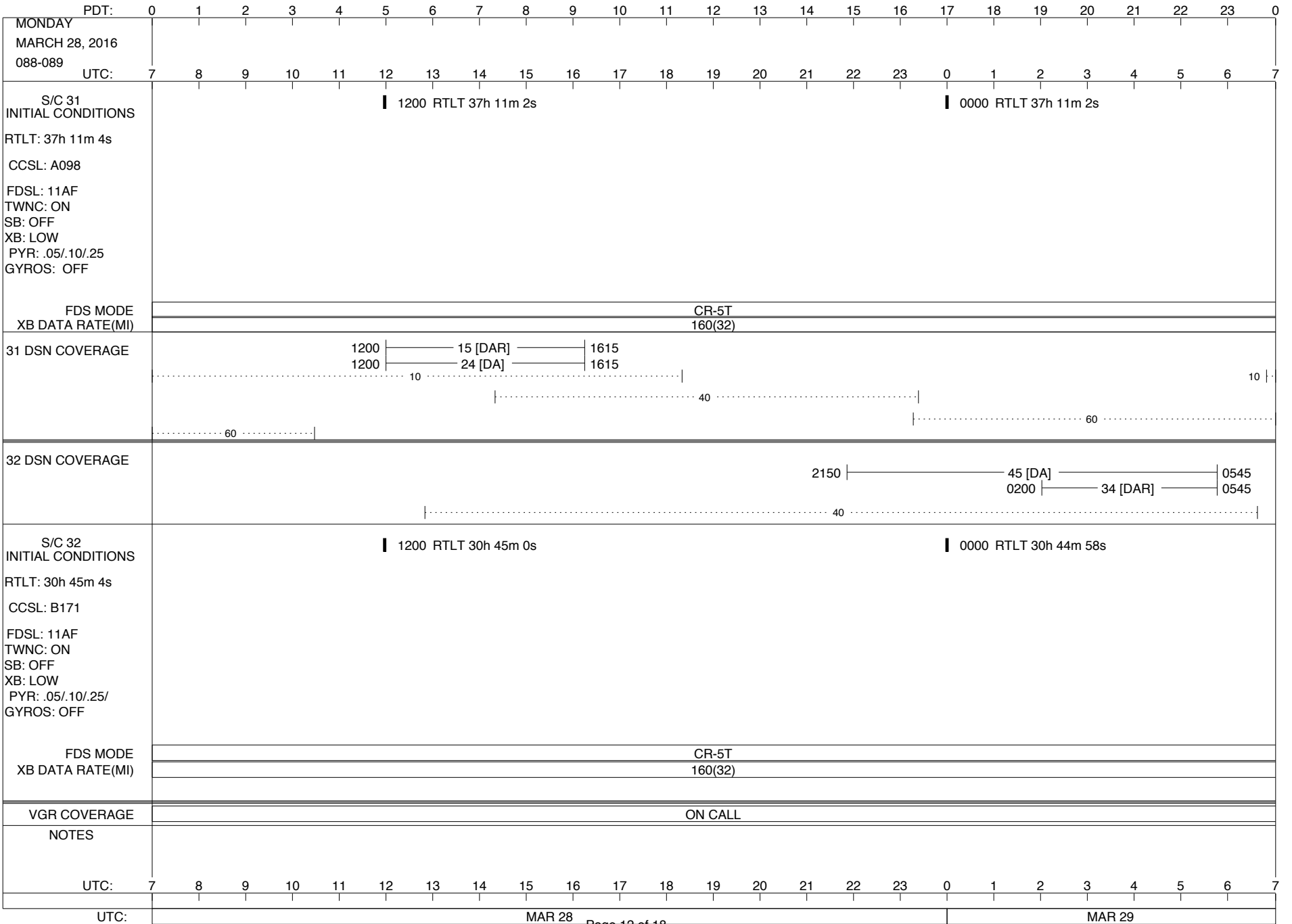
ISSUE DATE: 03/17/16 06:06

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FRIDAY MARCH 25, 2016 085-086	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 37h 11m 16s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC ON	1200 RTLT 37h 11m 14s												0000 RTLT 37h 11m 12s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	63 [DA] 1025 54 [DA] 0930 55 [DAR] 0930 60												40 0500 65 [DAR] 0500 54 [DA] 60												
32 DSN COVERAGE	1300 43 [o] 1700												2105 34 [D] 0210 40												
S/C 32 INITIAL CONDITIONS RTLT: 30h 45m 18s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 45m 16s												0000 RTLT 30h 45m 12s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
VGR COVERAGE	VGR												ON CALL												
NOTES																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	MAR 25												MAR 26												

PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
SATURDAY MARCH 26, 2016 086-087	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLTL: 37h 11m 12s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 37h 11m 10s												0000 RTLTL 37h 11m 8s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	.....10.....												.....40.....												
	65 [DAR]   0925												.....60.....												
	54 [DA]   0925												.....60.....												
32 DSN COVERAGE	.....1915												34 [o]   2350												
S/C 32 INITIAL CONDITIONS RTLTL: 30h 45m 12s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLTL 30h 45m 10s												0000 RTLTL 30h 45m 8s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL												ON CALL												
NOTES	[1] S/C 31=GS-4B @ 0318 XB=2.8K(41) NOT RECOVERABLE [1] S/C 31=GS-4B @ 0318 XB=2.8K(41) NOT RECOVERABLE																								
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	MAR 26												MAR 27												



ISSUE DATE: 03/17/16 06:06





ISSUE DATE: 03/17/16 06:06

PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0			
WEDNESDAY MARCH 30, 2016 090-091																												
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7			
S/C 31 INITIAL CONDITIONS RTLTL: 37h 10m 58s CCSL: A098 FDLS: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 37h 10m 56s														0000 RTLTL 37h 10m 54s													
	0932  ---- MAGCAL ----  1234														0932  ---- PESCAL ----  1252													
	----- TLC (SHORT-FORM) -----																											
FDS MODE	CR-5T																											
XB DATA RATE(MI)	160(32)																											
31 DSN COVERAGE	0905  ----- 15 [DAR] -----  1305 0905  ----- 26 [DA] -----  1305														10  ----- 40 -----  10  ----- 60 -----													
32 DSN COVERAGE															0230 - 0630  ----- 43 [D] -----													
S/C 32 INITIAL CONDITIONS RTLTL: 30h 44m 54s CCSL: B171 FDLS: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLTL 30h 44m 50s														0000 RTLTL 30h 44m 48s													
															ECR 114132 PART 2 0307  --  0345 TLMPRG 0407  *  CCSA MRO 0424  *  0436 CCSB MRO 0436  *  0448 CCSA MRO - REDUNDANT 0508  *  0520 CCSB MRO - REDUNDANT 0520  *  0532 EL-40 0244  *  CR-5T 0534  *													
FDS MODE	CR-5T														EL-40							ON CALL						
XB DATA RATE(MI)	160(32)														40(30)							160(32)						
VGR COVERAGE	ON CALL														VGR													
NOTES	[1] S/C 32=EL-40 @ 0244 XB=40(30) [2] S/C 32=CR-5T @ 0534 XB=160(32)																											
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7			
UTC:	MAR 30														MAR 31													

PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
THURSDAY MARCH 31, 2016 091-092																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLTL: 37h 10m 54s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 10m 54s												0000 RTLT 37h 10m 52s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1120  ----- 15 [DAR] -----  1545 1120  ----- 24 [DA] -----  1545 ..... 10 ..... ..... 40 ..... ..... 60 .....												2052   -   2119 TAPPOS 2354    2356 PWS/RH 0006   - -   0046 TAPPOS ↓ 2354 GS-4B 2356												
32 DSN COVERAGE	1845  ----- 43 [H,o] -----  2245 ..... 40 ..... 0035  ----- 35 [DA] -----  0525 0145  ----- 45 [DAR] -----  0525																								
S/C 32 INITIAL CONDITIONS RTLTL: 30h 44m 48s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 44m 46s												0000 RTLT 30h 44m 44s												
FDS MODE	ON CALL												ON CALL												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL												ON CALL												
NOTES	[1] S/C 31=GS-4B @ 2354 XB=2.8K(41) NOT RECOVERABLE																								
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	MAR 31												APR 01												



ISSUE DATE: 03/17/16 06:06

PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
FRIDAY APRIL 1, 2016 092-093																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 37h 10m 52s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 10m 50s												0000 RTLT 37h 10m 48s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
31 DSN COVERAGE	1235  ----- 24 [DAR] -----  1635 1235  ----- 26 [DA] -----  1635 ..... -----  ..... -----  ..... -----  ..... -----												..... -----  ..... -----  ..... -----  ..... -----												
32 DSN COVERAGE	..... -----  ..... -----  ..... -----  ..... -----												2330  ----- 45 [DA] -----  0525 0120  ----- 35 [DAR] -----  0525 ..... -----  ..... -----												
S/C 32 INITIAL CONDITIONS RTLT: 30h 44m 44s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 44m 40s												0000 RTLT 30h 44m 38s												
FDS MODE	ON CALL																								
XB DATA RATE(MI)	160(32)																								
VGR COVERAGE	ON CALL																								
NOTES																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	APR 01												APR 02												

ISSUE DATE: 03/17/16 06:06

PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
SATURDAY APRIL 2, 2016 093-094	UTC: 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 37h 10m 48s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 10m 48s												0000 RTLT 37h 10m 46s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1215   25 [DAR]   1630 1215   26 [DA]   1630												2255   63 [D]   0145												
32 DSN COVERAGE													0320 - 0620   43 [D]												
S/C 32 INITIAL CONDITIONS RTLT: 30h 44m 38s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 44m 36s												0000 RTLT 30h 44m 32s												
FDS MODE	ON CALL												ON CALL												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL												ON CALL												
NOTES	[1] S/C 31=GS-4B @ 0254 XB=2.8K(41) NOT RECOVERABLE																								
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	APR 02												APR 03												

ISSUE DATE: 03/17/16 06:06

PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
SUNDAY APRIL 3, 2016 094-095																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 37h 10m 46s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 10m 44s																								
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
31 DSN COVERAGE																									
32 DSN COVERAGE																									
S/C 32 INITIAL CONDITIONS RTLT: 30h 44m 32s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 44m 30s																								
FDS MODE													ON CALL												
XB DATA RATE(MI)													160(32)												
VGR COVERAGE													ON CALL												
NOTES																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	APR 03												APR 04												